

SEQUENCE LISTING

<110> FLINDERS TECHNOLOGIES PTY. LTD.

<120> A METHOD FOR PRODUCTIVITY IMPROVEMENT AND AGENTS USEFUL FOR SAME

<130> 12469560/TDO

<150> 60/485,241

<151> 2003-07-07

<160> 33

<170> PatentIn version 3.1

<210> 1

<211> 1158

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1155)

<223> "n" is unknown nucleotide

<400> 1

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cggatacaac catttctcnc atgggatggt ggtggaaant ttttncgggt ggggatgggc	180
tcgcggccta tcaccttggt ggtgggggtga tggcctacca aggcgacgaa cggtagcccg	240
cctgagaggg cgaccggcca cactgggact gagacaccgc ccgaactcct acgggaggca	300
gcaactggga atattgcca tgggcggaag cctgacgcag ngacgccgcg tgggggatga	360
cggccttngg gttgtaaacc tntttcagca gggacgaagt tgacgtgtac ctgtagaaga	420
agcgccggct aaatangtc cagcagccgc ggtaatangt agggcgcgag cgttntccgg	480

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aattattggg cgtaaagagt ttgtaggtgg cttgttgctt ttgccgtgaa agcccggtggc 540
ttaantacgg gtttgcggtg gatacgggca ggctagaggc tggtaggggc aagcggaatt 600
cctgggtgtag cggtgaaatg cgcagatata aggaggaaca ccggtggcga aggcggcttg 660
ctggggccagt tctgacgggt aggagcgaaa gcgtggggag cgaacaggat tagataccct 720
ggtagtccac gctgtaaacg ttgggcgcta ggtgtggggg tcttccacga tctctgtgcc 780
gtagctaacg cattaagcgc ccgcctggg gagtacggcc gcaaggctaa aactcaaagg 840
aattgacggg ggcccgcaca agcggcgag catgttgctt aattcgacgc aacgcgaaga 900
accttaccaa ggtttgacat aacccgaaa cactcanana tgggtgcctc ctttgactg 960
gtgtacaggt ggtgcatggc tgtcnncacc ctctgtctgt nagatgtngg gtttaagtccc 1020
gcaacgancg caacccttgg ttccatgttg ccagcacncc ctttgnggtg gtggggacnc 1080
atggganaat gccggggctn actcnggagg aaggtgggga tgacgtcaag tnatcntgcc 1140
ccttatgttc ttgnngtg 1158

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<210> 2

<211> 1437

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1437)

<223> "n" is unknown nucleotide

<400> 2

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gctggcgggc tgcttaacac atgcaagtcg aacgatgaac cacttcggtg gggattagtg 60
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ggggtctaat accggataac actnctgctc tcatgggcag ggggtaaaag ctccggcggt 180
gaaggatgag ccgcggcct atcagcttgt tggtagagga atggctcacc aaggcgacga 240
cgggtagccg gcctgagagg gcgaccggcc aactgggac tgagacacgg ccagactcc 300
tacgggaggg agcagtgggg aatattgcaa caatgggcga aagcctgatg cagcgacgcc 360
gcgtgaggga tgacggcctt cgggttgtaa acctctttca gcagggaaga agcgaaagtg 420
acggtacctg cagaagaagc gccggctaac tacgtgccag cagccgcggt aatacgtagg 480
gcgcaagcgt tgtccggaat tattgggcgt aaagagcttg taggcggctt gtcacgtcgg 540

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gtgtgaaagc ccggggctta accccgggtc tgcattcgat acgggctagc tagagtgtgg      600
taggggagat cggaattcct ggtgtagcgg tgaaatgcgc agatatcagg aggaacaccg      660
gtggcgaagg cggatctctg ggccattact gacgctgagg agcgaaagcg tggggagcga      720
acaggattag ataccctggt agtccacgcc gtaaacggtg ggaactaggt gttggcgaca      780
ttccacgtcg tcggtgccgc agctaacgca ttaagttccc cgctgggga gtacggccgc      840
aaggctaaaa ctcaaaggaa ttgacggggg ccgcacaag cagcgcagca tgtggcttaa      900
ttcgacgcaa cgcaagaac cttaccaagg cttgacatac accggaaagc atcagagatg      960
gtgccccct tgtggttcgg tgtacaggtg gtgcatggdt gtcgtcagct cgtgtcgtga     1020
gatgttgggt taagtccgc aacgagcgca acccttggtc tgtgttgcca gcatgccctt     1080
cggggtgatg gggactcaca ggagaccgcc ggggtcaact cggaggaagg tggggacgac     1140
gtcaagtcac catgcccctt atgtcttggg ctgcacacgt gctacaatgg ccggtacaaa     1200
gagctgcgat accgtgaggt ggagcgaatc tcaaaaagcc ggtctcagtt cggattgggg     1260
tctgcaactc gaccccatga agtcggagtt gctaataatc gcanatcagc attgctgcgg     1320
tgaatacgtt cccgggcctt gtacacaccg cccgtcacgt cagcaaagtc ggtaacaccc     1380
gaagccggtg gccaacccct tgtgggaggg agctgtcgaa ggtgggactg gcgattg      1437

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<210> 3

<211> 317

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(311)

<223> "n" is unknown nucleotide

<400> 3

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gtaatggccc anaaaaccgc cttcgccacc ggtgttcctc ctgatatctg cgcatttcac      60
cgctacacca ggaattocna tctcccctac cacactctag ctagcccgta tcnatgcaa     120
actcgggggtt aagcccnag ctttcacatc cgacgtgaca agccgcctac aanctcttta     180
cgcccaataa ttccgganaa cgctcgcacc ctacntntta ccgcggtgc tggcncgtnt     240
ttagccggtg cttcttctgc aggtaccgtc actttcgctt cttccctgct naaaaagggt     300
tacaacccta nggcgct

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<210> 4
 <211> 1048
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(1043)
 <223> "n" is unknown nucleotide

<400> 4
 tgagggatga cggcnttcgg ggttgtaaac nttntncacc agggaagaag cgaaagtgc 60
 ggtacctgca gaagaagcgc cgnctaacta cgggccagca tccgcggtaa tacgtagggc 120
 gcaatcgttg tccggaatta ntgggcgtaa agagntcgta ggcggcttat cacgtcgggt 180
 gtgaaagccc ggggcttaag ccccggtct gcattcgata cgggctagct agantntgnt 240
 aggggagatc ggaattcctg gtgtagcggg gaaatgcgca gatatcagga ggaacaccgg 300
 tggcgaaggc ggatctctgg gccattactg acgctgagga gcgaaagcgt ggggagcgaa 360
 caggattaga taccctggta gtccacgccg taaacgggtg gaactaggtg ttggcgacat 420
 tccacgtcgt cggtgccgca gctaacgcat taagttcccc gcctggggag tacggccgca 480
 aggctaaaac tcaaaggaat tgacgggggc ccgcacaagc agcggagcat gtggcttaat 540
 tcgacgcaac gcgaagaacc ttaccaaggc ttgacataca ccggaaagca tcagagatgg 600
 tgccccctt gtggtcgggtg tacaggtggt gcatggctgt cgtcagctcg tgctcgtgaga 660
 tgttgggtta agtcccgcaa cgagcgcaac ccttggttct gtgttgccag catgcccttc 720
 ggggtgatgg ggactcacag gagaacgccg ggggtcaactc ggaggaaggt ggggacgacg 780
 tcaagtcac atgcccccta tgtcttgggc tgcacacgtg ctacaatggc aggtaaatga 840
 gctgcgatac cgtgaggtgg agcgaatctc aaaaaagcct gtctcanttc ggattggggg 900
 ctgnaantcg accccatgaa agtcggaggt gctaattatc ccagatcaac attgctggcg 960
 gtgaatacgt tcccggggcc ttggtaaaca ccgccgtca angtnaagaa agtcgggtaa 1020
 cccccgaaan ccggtgggcc aancctt 1048

<210> 5
 <211> 508
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(472)
 <223> "n" is unknown nucleotide

<400> 5
 ccgccttcgc caccgggtgt tcctcctgat atctgcgcat ttcaccgcta caccaggaaa 60
 ttccnatctc ccctaccaca ctctanctan cccgratcga atgcaaaccg ggggttaanc 120
 cccgggcttt cacaccgcac ntgacaagcc gcctacaaac tctttacgcc caataattcc 180
 ggacaacgct tgcgccttac ntattaccgc ggctgctggc acntatttag cggcgcttc 240
 ttctgcaggt accgtcactt tcgcttcttc cctgctgaaa aagggtttaca acccgaaggc 300
 cgtcatccct cagcgggcgt cgtgcacatc ggctttcgcc cattgtgcaa tattccccac 360
 tgctgcctcc cntaggaatc tgggccgtgt ctcaatccag tgtggccggc cccctctcng 420
 gccggctacc gtctccctt ggtnaccatt anctcaccaa caactgatag gncgcgggct 480
 catcttcacg cgggaacttt caaccacc 508

<210> 6
 <211> 1420
 <212> DNA
 <213> actinomycete

<400> 6
 ggcggcgtgc ttaacacatg caagtcgaac gatgaagccc ttcgggggtgg attagtggcg 60
 aacgggtgag taacacgtgg gcaatctgcc ctctactctg ggacaagccc tggaaacggg 120
 gtctaatacc ggatacgatt cgggagggcat ctcttggtac tggaaagctc cggcggtgaa 180
 ggatgagccc gcggcctatc agcttggtgt gggtaatggc ctaccaaggc gacgacgggt 240
 agccggcctg agagggcgac cggccacact gggactgaga cacggcccag actcctacgg 300
 gaggcagcag tggggaatat tgcacaatgg gcgaaagcct gatgcagcga cgcgcgtga 360
 gggatgacgg ccttcgggtt gtaaacctct ttcagcaggg aagaagcgag agtgacggta 420

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cctgcagaag aagcgccggc taactacgtg ccagcagccg cggtaatacgt tagggcgcaa      480
gcgttggtccg gaattattgg gcgtaaagag ctcgtagggc gcttggtcacg tcgggtgtga      540
aagccccgggg cttaaccccc ggtctgcacg cgatacgggc aggctagagt gtggtagggg      600
agatcggaat tcctggtgta gcggtgaaat gcgcagatat caggaggaac accggtggcg      660
aaggcggatc tctggggccat tactgacgct gaggagcgaa agcgtgggga gccaacagga      720
ttagataccc tggtagtcca cgccgtaaac gttggaacta ggtgttggtg acattccacg      780
tcgtcggtgc cgcagctaac gcattaagtt ccccgcttgg ggagtacggc cgcaaggcta      840
aaactcaaag gaattgacgg gggcccgcac aagcagcgga gcatgtggct taattcgacg      900
caacgcgaag aaccttacca aggcttgaca tataccggaa agcgccagag atggtgcccc      960
ccttggtggtc ggtatacagg tgggtgcatgg ctgtcgtcag ctcggtgctgt gagatgttgg     1020
gttaagtccc gcaacgagcg caacccttgt cctgtgttgc cagcatgccc ttcgggggtga     1080
tggggactca caggagaccg ccgggggtcaa ctcgaggaa ggtggggacg acgtcaagtc     1140
atcatgcccc ttatgtcttg ggctgcacac gtgctacaat ggccggtaca aagagctgcg     1200
atgccgtgag gcggagcgaa tctcaaaaag ccggtctcag ttcggattgg ggtctgcaac     1260
tcgaccccat gaagtcggag ttgctagtaa tcgcagatca gcattgctgc ggtgaatacg     1320
ttccccgggc ttgtacacac cgcccgtcac gtcacgaaag tcggtaacac ccgaagccgg     1380
tggcccaacc cctcggggag ggagctgtcg aaggtgggac                               1420

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<210> 7

<211> 1239

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1217)

<223> "n" is unknown nucleotide

<400> 7

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gcttnttggg gggncnatgg cctaccaagg ngaggacggn tanccngcct gngagggaga      60
ccgnccacac tgggaatgng anacggccca gaatcctacg ggaggcagca nnggggaana      120
ttgcacaang ggcgaaagcc tgatgcagng angccgcgtg agggaagacg gcctttgggt      180
tgtaaacctn ttnagcagg gaagaagcga aagtgcgggt acctgcagaa gaagcgccgg      240

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ctaantangt gccagcagcc gcggttaatan gtagggccca agcgttggtcc ggaattattg      300
ggcgtaaaga gcttgtaggc ggcttggtcan gtnggatgtg aaagcccggg gcttaacccc      360
gggttttcat ttgatacggg ctagctagag tgtggtaggg gagatnggaa ttcttggtgt      420
agcggtgaaa tgcgcagata tcaggaggaa caccggtggc gaaggcggat ctctggggcca      480
ttactgacgc tgaggagcga aagcgtgggg agcgaacagg attagatacc ctggtagtcc      540
acgccgtaaa cggttggaac taggtgttgg cgacattcca cgctcgtcgtt gccgcagcta      600
acgcattaag ttccccgcct ggggagtacg gccgcaaggc taaaactcaa aggaattgac      660
ggggggccgc acaagcagcg gagcatgtgg ctttaattcga cgcaacgcga agaaccttac      720
caaggcttga catataccgg aaagcatcag agatggtgcc ccccttggtg tcggtataca      780
ggtggtgcat ggctgtcgtc agctcgtgtc gtgagatgtt gggttaagtc ccgcaacgag      840
cgcaaccctt gttctgtgtt gccagcatgc ccttcggggg gatggggact cacaggagac      900
tggcggggtc aactcggagg aaggtgggga cgacgtcaag tcatcatgcc cttatgtct      960
tggggctgca cacgtgttac aatggccggt acaatgagct gcgatgccgc gaggcggagc     1020
gaatctcaaa aagccggtct cagttcggat tgggggtctg naactcgacc ccatgaantc     1080
ggagttgcta ataatcccaa attcancatt ggtgcggtga atacttcccc ggcttggtac     1140
acnaccgccc gtcaactcac gaaagtcggt naaacccgaa accggtgggc caacccttg      1200
tgggaaggaa ctggccnaag tgggactggc gattgggac                                1239

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<210> 8

<211> 431

<212> DNA

<213> actinomyete

<220>

<221> misc_feature

<222> (1)..(424)

<223> "n" is unknown nucleotide

<400> 8

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cgccttcgc caccggtgtt cctcctgata tctgcgcatt tcacogctac accaggaatt      60
ccnatctccc ctaccacact ctagctagcc cgtatcaaatt gcaaaccggg ggtaagccc      120
cgggctttca catccnacgt gacaagccgc ctacaanctc tttagcccca ataattccgg      180
acaacgcttg cgccctaent attaccgagg ctgctggcac ntatttagcc ggcgcttctt      240

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- 8 -

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ctgcaggtac cgtcactttc gctncttccc tgctgaaana ggtttacaac ccaaaggccn      300
tcattccctcn ccggctcctt tgctctnggc ttncncccat tgttcaannt tccccactgc      360
tncctccctt cggaatctgg gccgntgtct cattcccttt ntggccgggc cccctcncag      420
gccngctacc c .                                     431

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<210> 9

<211> 653

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(640)

<223> "n" is unknown nucleotide

<400> 9

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ctcagcgctcn gtaatggccc aaaaaccgcc ttogccaccg gtgttcctcc tgatatctgc      60
gcatttcacc gctacaccag gaattccnat ctccccctacc acactctagc tagcccgat      120
cnaatgcaaa ccggggggta anccccgggc ttccacatcc nacntgacaa gccgcctaca      180
anctctttac gcccaataat tccggacaac gcttgcnccc tacttattac cgcggctgct      240
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aaaaagggtt acaaccnaa ggccgtcatc cctcacgcgg cntcgctgca tcaggctttc      360
nccattgtg caatattccc cactgctgcc tcccgtagga ttctgggccg tntctcattc      420
ccantgtggc cggtcgccct ctacggccgg ctaccgctcn tcncttggt aggcattac      480
cccaccaaca agctnatagg ccgcgggctc atccttcacc gccggaagct ttcaaccccn      540
tccatgcggg anaaattggt ntccggtatt aaaccccggt tccagggnnt gtcccaaaat      600
tgaagggggg attgnccact ttttactcac ccgttcnccn ctaatccacc acc              653

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<210> 10

<211> 1444

<212> DNA

<213> actinomycete

<400> 10

acgaacgctg gcggcgctgct taacacatgc aagtcgaacg atgaagccgc ttcggtggtg	60
gattagtggc gaacgggtga gtaacacgtg ggcaatctgc ccttcactct gggacaagcc	120
ctggaaacgg ggtctaatac cggataaacac tctgtcccgc atgggacggg gttgaaagct	180
ccggcggtga aggatgagcc cgcggcctat cagcttggtg gtggggtaat ggcctaccas	240
ggcgacgacg ggtagccggc ctgagagggc gaccggccac actgggactg agacacggcc	300
cagactccta cgggaggcag cagtggggaa tatcgacaaa tgggagaaag cctgatgcag	360
cgacgccgcg tgagggatga cggccttcgg gttgtaaacc tctttcagca gggagaagc	420
gaaagtgcag gtacctgcag aagaagcgcc ggctaactac gtgccagcag ccgcggtaat	480
acgtagggcg caagcgttgt ccggaattat tgggcgtaaa gagctcgtag gcggcttgct	540
acgtcggatg tgaaagcccc gggcttaacc ccgggtctgc attcgatacg ggctagctag	600
agtgtggtag gggagatcgg aattcctggt gtagcggatg aatgcgcaga tatcaggagg	660
aacaccggtg gcgaaggcgg atctctgggc cactactgac gtctgaggag cgaagcgctg	720
gggagcgaac aggattagat accctggtag tccacgccgt aaacgttggg aactaggtgt	780
tggcgacatt ccacgtcgtc ggtgccgcag ctaacgcatt aagttccccg cctggggagt	840
acggccgcaa ggctaaaact caaaggaatt gacgggggcc cgcacaagca gcggagcatg	900
tggcttaatt cgacgcaacg cgaagaacct taccaaggct tgacatatac cggaaagcat	960
cagagatggt gcccccttg tggtcggtat acagggtggtg catggctgtc gtcagctcgt	1020
gtcgtgagat gttgggttaa gtcccgcaac gagcgcaacc cttgttctgt gttgccagca	1080
tgcccttcgg ggtgatgggg actcacagga gactgccggg gtcaactcgg aggaaggtgg	1140
ggacgacgtc aagtcacat gcccccttatg tcttgggctg cacacgtgct acaatggccg	1200
gtacaatgag ctgcgatgcc gcgaggcgga gcgaatctca aaaagccggt ctgagttcgg	1260
attggggctc gcaactcgac cccatgaagt cggagttgct agtaatcgca gatcagcatt	1320
gctgcggatga atacgttccc gggccttgta cacaccgccc gtcacgtcac gaaagtcggt	1380
aacacccgaa gccggtggcc caacccttgt gggagggagc tgtcgaaggt gggactggcg	1440
attg	1444

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<210> 11
 <211> 503
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(499)
 <223> "n" is unknown nucleotide

<400> 11
 ccgccttcgc caccgggtgtt cctcctgata tctgcgcatt tcaccgctac accaggaatt 60
 ccnatctccc ctaccgaact ctanctgtcc cgtatcnact gcaaaccggt gggttaagccc 120
 cgggctttca caaccgacnt gacaagccgc ctacaanctc ttacnccca ataattccgg 180
 acaacgcttg cgcctacnt attaccggcg ctgctggcac ntatttagcc ggcgcttctt 240
 ctgcaggtac cgtcactttc gcttcttccc tgctgaaaaa gggtttacaac ccgaaggccg 300
 tcntccctca cgcggcgctg ctgcatcagg ctttcgcccc ttgtgcaata ttccccactg 360
 ctgcctcccg taggattctg ggccgtgtct cantcccant ntggccgggc ccctctcagg 420
 ccgntaccc gtcgtccctt ggtgaaccnc tacctcncca acaanctgat agggcgcggg 480
 ctcanctgc acgcccgganc ttt 503

<210> 12
 <211> 1173
 <212> DNA
 <213> actinomycete

<220>
 <221> misc_feature
 <222> (1)..(1144)
 <223> "n" is unknown nucleotide

<400> 12
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 agtaanangt gggcaatttg ccttcatctt tggacaagcc ctggaaacgg gttteataacc 120
 ggataacatt ttntcccgca tgggagggg ttgaaagntc cggcggtgaa ggatgagccc 180
 gcggcctatn agcttggttg tggggtaatg gcctacccaa gggagacggg tagccggcct 240

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gagagggcga ccggccacac tgggaatgag anacggccca gaatcctacg ggaggcagca      300
gtggggaata ttgcacaatg ggcgaaagcc tgatgcagcg angccgcgtg agggatgacg      360
gccttngggg tgtaaacctt tttnagcagg gaagaagcga aagtgcaggg acctgcagaa      420
gaagcgccgg ctaaataagt gccagcagcc gcggtataaa gtagggcgca agcgttgtcc      480
ggaattattg ggcgtaaaga gcttgtaggc ggcttgtcan gtnggatgtg aaagcccggg      540
gnttaacccc gggtttgcac ttgatacggg ctagnatagag tgtggtaggg gagatnggaa      600
ttcctgggtg agcggtgaaa tgcgcagata tcaggaggaa caccgggtggc gaaggcggat      660
ctctgggcca ttactgacgc tgaggagcga aagcgtgggg agcgaacagg attagatacc      720
ctggtagtcc acgccgtaaa cgttgggaac taggtgttgg cgacattcca cgtcgtcggt      780
gccgcagcta acgcattaag ttccccgnct ggggagtagc gccgcaaggc taanactcaa      840
aggaattgac gggggcccg nacaagcagcg gancatgtgg cttaattcga cgcanccgca      900
agaaccttac caaggettga catataccgg aaagcatcag agatgggtgcc ccccttgtgg      960
tcgntataca ngtggtgcat gncgtgtcgtc acctcgtgtc gtgagatgtt gggttaagtc     1020
ccgcaacgag cgcnacccct gntctgtgtt gncancatgc ccttcggggg tgatggggac     1080
tcacaggana ctgnccgggg tcaactccgg angaagggtg gtgacgaagt caaggtcac     1140
atgnccccct atgtcttggt gctgcacacg tgc                                     1173

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<210> 13

<211> 1404

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(493)

<223> "n" is unknown nucleotide

<400> 13

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ttcggnggtg gantagnggc gnacgggnga ccaacangng ggcaatcccc ccttcanttt      60
nggacaaccc ctggaaacgg gttntaatac cggataacan tttntccccg catgggagg      120
ggttgaaagc tccggcgggtg aaggatgagc ccgcggccta tcagcttggt ggtggggtaa      180
tgccctacca aggcgacgac gggtagccgg cctgagaggg cgaccggcca cactgggant      240
gaganacggc ccagaatcct acgggaggga gcagtgggga atattgcaca atgggcgaaa      300

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gcctgatgca ggcacgccc gtgagggatg acggccttcg gggtgtaaac ctttttcagc      360
agggagaag cgaagtgac ggtacctgca gaagaagcgc cggctaaata ngtgccagca      420
gccgcggtaa tangtagggc scaagcggtg tccggaatta ttgggcgtaa agagnttgta      480
ggcggcttgt cangtcggat gtgaaagccc ggggcttaac cccgggtttg cattcgatac      540
gggctagcta gagtgtggtg ggggagatcg gaattcctcg tgtagcggtg aaatgcgcag      600
atatcaggag gaacaccggt ggcgaaggcg gatctctggg ccattactga cgctgaggag      660
cgaaagcgtg gggagcgaac aggaattaga taccctggta gtccacgccg taaacgttg      720
gaactagggtg ttggcgacat tccacgtcgt cggtgccgca gctaacgcat taagttcccc      780
gcctggggag tacggcccgc aaggctaaaa ctcaaaggaa ttgacggggg cccgcacaag      840
cagcggagca tgtggcttaa ttcgacgcaa cgcgaagaac cttaccaagg cttgacatat      900
accggaaagc atcagagatg gtgccccctt tgtggtcggg atacaggtgg tgcattggctg      960
tcgtcagctc gtgtcgtgag atgttgggtt aagtcccgca acgagcgcaa cccttggttc     1020
tgtgttgccc agcatgccct tcggggtgat ggggactcac aggagactgg ccggggtcaa     1080
ctcggaggaa ggtggggacg acgtcaagtc atcatgcccc ttatgtcttg gggctgcaca     1140
cgtgctacaa tggccggtac aatgagctgc gatgccgcga aggcggagcg aatctcaaaa     1200
aagccggtct cagttcggat tggggtctgc aactcgacc ccatgaagtcg gagttgctag     1260
taatcgcaga tcagcattgc tgcggtgaat acgttcccg gcttgtaca caccgcccgt     1320
cacgtcacga aagtcggtta caccgaagc cgggtgtcca accccttggt ggaggagct      1380
gtcgaagggtg ggactggcga ttgg                                     1404

```

<210> 14

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1411)

<223> "n" is unknown nucleotide

<400> 14

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aacacatgca agtcgaacga tgaagccgct tcggtggtgg attagtggcg aacgggtgag      60
taacacgtgg ccaantgtgn ccgtcactat gggacgaaga ccttggaac ggggtctaata      120

```

```

accggataac actctgtccc gcatgggacg gggttgaaag ctccggcggg gaaggatgag      180
cccgcggcct atcagcttgt tggtggggta atggcctacc aaggcgacga cgggtagccg      240
gcctgagagg gcgaccggcc aactggggac tgagacacgg ccagactcc tacgggaggg      300
agcagtgggg aatattgcac aatgggcgaa agcctgatgc agcgacgccg cgtgagggat      360
gacggccttc gggttgtaaa cctctttcag cagggaagaa gcgaaagtga cggtacctgc      420
agaagaagcg ccggctaact acgtgccagc agccgcggta atacgtaggg cgcaagcggt      480
gtccggaatt attgggcgta aagagctcgt aggcggccttg tcacgtcgga tgtgaaagcc      540
cggggcttaa ccccggtct gcattcgata cgggctagct agagtgtggt aggggagatc      600
ggaattcctg gtgtagcggg gaaatgcgca gatattcagg aggaacaccg gtggcgaagg      660
cggatctctg ggccattact gacgctgagg agcgaaagcg tggggagcga acaggattat      720
ataccctggg agtccacgcc gtaaacgttg ggaactaggt gttggcgaca ttccacgtcg      780
tcggtgccgc agctaacgca ttaagttccc cgctgggga gtacggccgc aaggctaaaa      840
ctcaaaggaa ttgacggggg ccgcacaag cagcggagca tgtggcttaa ttcgacgcaa      900
cgcaagaac cttaccaagg cttgacatat accggaaagc atcagagatg gtgccccct      960
tgtggtcggg atacaggtgg tgcattggctg tcgtcanctc gtgtcgtgag atgttgggtt     1020
aagtcccgca acgagcgcaa cccttgttct gtgttgccag catgcccttc ggggtgatgg     1080
ggactcacag gagactgccg ggggtcaactc ggaggaaggt ggggacgacg tcaagtcac      1140
atgcccctta tgtcttgggc tgcacacgtg ctacaatggc cgctacaatg acctgcgatg     1200
ccgcgaggcg gaccgaatct caaacaagcc cgtctcattc ggattgcggg ctgcaactcc     1260
gaccccatga agtccgactt gctagtactc gcacgtcaac attgctgcgc tgaatacgtc     1320
ccggggcctt gtacacaccg ccggtcacgt cagcaaagtc ggtaacaccc gaagccggtg     1380
gnccaacccc ttgtgggagg gagctgtcga a                                     1411

```

<210> 15

<211> 562

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(547)

<223> "n" is unknown nucleotide

<400> 15

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cgcgccttcgc caccggtggt cctcctgata tctgcgcatt tcaccgctac accaggaatt      60
ccnctctccc ctaccacact ctagctance cgtatcnaat gcaaaccgga ggtaacccc      120
cgggctttca caccnact nacaanccgc ctacaaactc ttacgcccata ataattccgg      180
acaacgcttg cgcctactt attaccgagg ctgctggcac ttatttagcc ggcgcttctt      240
ctgcaggtac cgtcactttc gcttcttccc tgctgaaaaa ggtttacaac ccgaaggcng      300
tcctccctca cggggentcg ctgcatcagg ctttcgcccata ttgtgcaata tccccactg      360
ctgcctcccg tagnantctg ggccgtntct cantcccagt gtggncggtc gccctctcag      420
gccggctacc cgtcgtcncc tnggtnaacc attanntcac caacaagctg ataggccgag      480
ggctcactct tcaccgagg agcttttaac ccctgcccata gaaaacagan gtnttatccg      540
gtattanaac ccgtttccag gg                                         562

```

<210> 16

<211> 1390

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1362)

<223> "n" is unknown nucleotide

<400> 16

```

atgcaagtcg agcggaaagg cccttcgggg tactcgagcg gcgaacgggt gagtaacacg      60
tgagttaatc tgccccaggc tctggatacc caccggaaaa cggtgattaa taccgaatac      120
gacaaccgat ttgcatgac tggtggtgna aagtttttcg gcctgggatg tgcttcgagg      180
cctatcagct tgttggtgag gtaatggctc acccaaggct tcgacggtag ccggcctgag      240
agggtgaccg nccacactgg gactgagaca cggcccagac tcctacggga ggcagcagtg      300
gggaatattg gacaatgggc ggaagcctga tcagcaacg ccgcgtgagg gatgacggcc      360
ttcgggttgt aaacctcttt cagcacagac gaagcgcaag tgacggtatg tgcagaagaa      420
ggaccggcca actacgtgcc agcagccgag gtaatacgta gggccgagc gttgtccgga      480
attattgggc gtaaagggt cgtaggcggg ctgtcgcgtc gggagtgaac accaggtgct      540

```

```

taacacctgg cctgctttcg atacgggcag nctagaggta cncaggggag aatggaattc      600
ctggtgtagc ggtgaaatgc gcagatatca ggaggaaaca ccggtggcga agncggttct      660
ctgggagtat cctgacgctg aggagcgaaa gtgtggggag cgaacaggat tagataccct      720
ggtagtccac accgtaaacg ttgggcgcta ggtgtgggac acattccacg tgttccgtgc      780
cgcagctaac gcattaancg ccccgccctg ggagtacggc cgcaangcta aaactcanag      840
gaattgacgg gggcccgcac aagcggcgga gcatgcggat taattcgatg caacgcgaag      900
aaccttacct gggtttgaca tacaccgga agccgtacag atacggcccc ttttagtcgg      960
tgtacagggtg gtgcatggct gtcgtcagct cgctgtcgtg agatgttcgg gttaagtccc     1020
gcaacgagcg caaccctcgt cctatgttgc cagcaattcg gttggggact cataggagac     1080
tgccgggggtc aactcggagg aagggtggga tgacgtcaag tcatcatgcc ccttatgtcc     1140
agggcttcac gcatgctaca atggccggtg caaagggctg cgatcccgtg agggtgagcg     1200
aatcccaaaa agccggtctc agttcggatt ggggtctgca actcgacccc atgaagtcgg     1260
agtcgctagt aatcgcagat cagcaacgct gcggtgaata cgttcccggg ccttgtagac     1320
accgcccgtc acgtcacgaa agtcggcaac acccgaagcc antggcccaa ctcgtaagag     1380
agggagctgt                                     1390

```

<210> 17

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(638)

<223> "n" is unknown nucleotide

<400> 17

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gtgcttaaca catgcaagtc gaacgatgaa gccgcttcgg tggtaggatta gtggcgaacg      60
ggtgagtaac acgtgggcaa tctgcccttc actctgggac aagccctgga aacgggggtct     120
aataccggat aacactctgt cccgcatggg acgggggttg aagctccggc ggtgaaggat     180
gagccccgcg cctatcagct tgttggtggg taatggccta ccaaggcgac gacgggtagc     240
cggcctgaga gggcgaccgg ccacactggg actgagacac ggcccagact cctacgggag     300
gcagcagtgg ggaatattgc acaatgggcg aaagcctgat gcagcgacgc cgcgtgaggg     360

```

```

atgacggcct tcgggttgta aacctcttcc agcagggaag aagcgaaagt gacggtacct 420
gcagaagaag cgccggctaa ctacgtgccg gcagccgcgg taatacgtag ggcgcaagcg 480
ttgtccggaa ttattgggcg taaagagctc gtaggcggct tgtcacgtcg gatgtgaaag 540
ccccgggctt aaccccggtt ctgcattcga tacgggctag ctagagtgtg gtaggggaga 600
tcggaattcc tgggtgtagcg gtgaaatgcg cagatatnca ggaggaacac cggtggcgaa 660
ggcggatctc tggccattac tgacgtcgag gagcgaaagc gtggggagcg aacaggatta 720
gataccctgg tagtccacgc cgtaaacgtt gggaactagg tgttggcgac attccacgtc 780
gtcgggtgccg cagctgaacg cattaagtcc cccgcctggg gagtacggcc gcaaggctaa 840
aactcaaagg aattgacggg ggcccgacac agcagcggag catgtggctt aattcgacgc 900
aacgcgaaga accttaccac ggcttgacat ataccggaaa gcatcagaga tgggtgcccc 960
cttgtggtcg gtatacaggt ggtgcatggc tgtcgtcagc tcgtgtcgtg agatgttggg 1020
ttaagtcccg caacgagcgc aacccttggt ctgtgttgcc agcatgccct tcggggtgat 1080
ggggactcac aggagactgc cggggtcaac tcggaggaag gtggggacga cgtcaagtca 1140
tcatgccccct tatgtcttgg gctgcacacg tgctacaatg gccggtacaa tgagctgcga 1200
tgccgcgagg cggagcgaat ctcaaaaagc cgggtctcagt tcggattggg gtctgcaact 1260
cgaccccatg aagtcggagt tgctagtaat cgcagatcag cattgctgcg gtgaatacgt 1320
tcccgggctt tgtacacacc gccgtcacgt cacgaaagtc ggtaacaccc gaagccggtg 1380
gcccaaccgc cttgtgggag ggaactttcc a 1411

```

<210> 18

<211> 1370

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1367)

<223> "n" is unknown nucleotide

<400> 18

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atgcaagtng aacgatgaan ccntttgggg tggattagtg gcgaacgggt gagtaanang 60
tgggcaattt gcccttcaat ttgggacaag ccctggaaac ggggtntaat accggataac 120
antntgtccc gcatgggacg ggggtaaaag ctccggcggt gaaggatgag cccgcggcct 180
atnagcttgt tgggtggggtg atggcctacc aaggcgacga cgggtagccg gcctgagagg 240

```


gcgaccggcc acactgggac tgagacacgg cccagactcc tacgggagggc agcagtgggg 300
 aatattgcac aatgggcgaa agcctgatgc agcgacgccg cgtgagggat gacggccttc 360
 gggttgtaaa cctttttcag cagggaagaa gcgaaagtga cggtagctgc agaagaagcg 420
 ccggctaaat angtgccagc agccgcggta atangtaggg cgcaagcggt gtccggaatt 480
 attgggcgta aagagtttgt aggcggcttg tcacgtngga tgtgaaagcc cggggcttaa 540
 ccccggtttt gcattcgata cgggctagct agagtgtggt aggggagatc ggaattcctg 600
 gtgtagcggg gaaatgcgca gatatcagga ggaacaccgg tggcgaaggc ggatctctgg 660
 gccattactg acgntgagga gcgaaagcgt ggggagcnaa cagnattaga taccctggta 720
 gtccaagccg taaacgttgg gaactangtg ttggcgacat tccacgtcgt cnntgccgca 780
 nctaacgcat taagttcccc gcctggggag tacggccgca aggctaanac tcaaaggaat 840
 tganngnggc ccgcacaagc agcggagcat gtggcttant tcnacgcanc gcgaagaacc 900
 ttaccaaggt ttgccatata ccggaagca tcagagatgg tgccccctt gtggtcggta 960
 tacaggtggt gcntggctgt cgtcagctcg tgtcgtgaca tggttggttaa gtcccgtcaa 1020
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 gagactgccg gggtaactc ggaggaaggt ggggacgacg tcaagtcac atgcccctta 1140
 tgtcttgggc tgcacacgtg ctacaatggc cggtagaatg agctgcgatg ccgcgaggcg 1200
 gagcgaatct caaaaagccg gtntcagttc ggattggggg ctgcaactcg accccatgaa 1260
 gtcggagttg ctagtaatcg cagatcagca ttgctgcggg gaatacgttc cggggccttg 1320
 tacacaccgc ccgtcacgtc acgaaagtcg gtaacacccg aagccgntgg 1370

<210> 19

<211> 1162

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1156)

<223> "n" is unknown nucleotide

<400> 19

gaacgatgaa gccgtttcgg tgggtgatta gtggcgaacg gtgagtaaaa gtggcaattt 60
 ncccttcatt ttggacaagc cctgggaacg ggttitaanac cggataacat tntgtccgcg 120

```

atggggacggg gttgaaagnt cccggcggtg aaggatgagc ccgcggcnta tcagcttggt 180
ggtaggggtaa tggcctacca aggcgacgac gggtagccgg cctgagaggg cgaccggcca 240
cactgggant gagacacggc ccagactcct acgggaggca gcagtgggga atattgcaca 300
atggggcгаа gcctgatgca gcgacgccgc gtgagggatg acggccttcg ggttgtaaаc 360
ctnttttcagc agggaagaag cgaaagtгac ggtacctgca gaagaagcgc cggctaaata 420
ngtgccagca gccgcggtaa tangtagggc gcaagcggtg tccggaatta ttgggcgtaa 480
agagcttgta ggcggcttgt cangtcggat gtgaaagccc ggggcttaac cccgggttg 540
cattcgatac gggctagtta gagtgtggta ggggagatng gaattcctgg tgtagcggtg 600
aatgcgcag atatcaggag gaacaccggt gccgaaggcg gatctctggg ccattactga 660
cgctgaggag cgaaagcgtg gggagcnaac aggattagat accctggtag tccacgccgt 720
aaacgttggg aactaggtgt tggcgacatt ccacgtcgtc ggtgccgcag ctaacgcatt 780
aagttccccg cctggggagt acggccgcaa ggctaaaact caaaggaatt gacggggggc 840
cgcacaaгca gcggagcatg tggcttaatt cgacgcaacg cgaacaacct taccaaggct 900
tgacatatac cggaaagcat canagatggt gcccccttg tggtcggtat acangtggtg 960
catggctgtc gtcagctcgt gtcgtgagat gttgggttan gtcccгcaac gagcgcnacc 1020
cttgttctgt gtcgnnagc atgcccttcg nggtgatggg gactcacang agactgncgg 1080
ggtccactcg gaggaaggтg gcgacnacgt canntcatca tgccccctta tgtcttggn 1140
ctggccacgt gcnacnatgg cc 1162

```

<210> 20

<211> 1411

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(1404)

<223> "n" is unknown nucleotide

<400> 20

```

gctggcggcg tgcttaacac atgcaagtcg aacgatgaag ccgcttcggt ggtggattag 60
tggcgaacgg gtgagtaaca cgtgggcaat ctgcccttca ctctgggaca agccctggaa 120
acgggggtcta ataccgгata acactctgtc ccgcatggga cggggttgaa agctccggcg 180

```

```

gtgaaggatg agccccgggc ctatcagctt gttggtggg taatggccta ccaaggcgac      240
gacgggtagc cggcctgaga gggcgaccgg ccacactggg actgagacac ggcccagact      300
cctacgggag gcagcagtgg ggaatattgc acaatgggcg aaagcctgat gcagcgacgc      360
cgcgtagagg atgacggcct tcgggttgta aacctctttc agcagggaaag aagcgaaagt      420
gacgggtacct gcagaagaag cgccgggctaa ctacgtgcca gcagccgcgg taatacgtag      480
ggcgcaagcg ttgtccggaa ttattgggcg taaagagctc gtagggcggt tgtcacgtcg      540
gatgtgaaag cccgggggctt aacccccgggt ctgcattcga tacgggctag ctagagtgtg      600
gtagggggaga tcggaattcc tgggtgtagcg gtgaaatgcg cagatatcag gaggaacacc      660
ggtgggggaag gcggatctct gggccattac tgacgtgag gagcgaaagc gtggggagcg      720
aacaggatta gataccctgg tagtccaagc cgtaaacgtt gggaactang tgttggcgac      780
attccacgtc gtcggtgccg cagctaacgc attaatctcc ccgtcctggg gagtacggcc      840
gcnaggctaa aactcaaagg aattgacggg ggcccgaca agcagcggag catgtggctt      900
anttcgacgc nacgcgaaga accttnccaa ggctgacata taccggaaag catcacagat      960
ggtgcccccc ttgtggtcgg tatacagggt ggtgcatggc tgttcgtcag ctctgtctgt      1020
gagatgttgg gttaagtccc gcaaagagcg caaccgtgtt ctgtgttgcc agcatgccct      1080
tcggggtgat ggggactcac acgagactgt cngggtaac tcggaggaag gtggggacga      1140
cgtcaagttc atcatgcccc ttatgtcttg ggctgcacac gngctacaat ggccggtaca      1200
atgagnnggg atgccgcgag gcggagcgaa tctcaaaaag ccggtctcag ttcggtattg      1260
ggtctgcaac tgaccccatg aagtcggagt tgctagtaat cgcatatcag cattgctgcg      1320
gtgaatacgt nccccggcct ngtaacacac acccgtcacg tcacgaaagt cggtaacacc      1380
ctaagccggt gncccaaccc ctnttgggag g                                     1411

```

<210> 21

<211> 549

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(431)

<223> "n" is unknown nucleotide

<400> 21
 ccaganatcc gccttcgcca ccggtgttcc tcttgatata tgcgcatttc accgctacac 60
 caggaattcc gatctcccct accacactct agctagcccg tatcgaatgc agacccgggg 120
 ttaagccccc ggctttcaca tccgacgtga caagccgctt acgagctctt tacgccaat 180
 aattccggac aacgcttgcg ccctacgtat taccgcggt gctggcacgt agttagccgg 240
 cgcttcttct gcaggtaccg tcactttcgc ttcttccttg ctgaaagagg tttaacaacc 300
 gaaggncgtc atccctcacg cggcgtcgct gcacaggct ttgcgccatt gtgcaatatt 360
 cccactgct gcctcccgta ggagtctggg ncgtgttcaa tnccagtggg gggccggtcg 420
 ccctctcagg ncggctaccg tcgtgcgctt ggtaggcatt accacaacaa gctgataggc 480
 gggggtcata cttcaacgcc ggagcttcaa acccgccat gcgggacaag tgtatccgg 540
 attaaaccc 549

<210> 22

<211> 672

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(643)

<223> "n" is unknown nucleotide

<400> 22

tcagtnatgg cccagaanga tccgncttcg ccaccggtgt tcttctgat atctgcgcat 60
 ttaccgcta caccaggaat tccgatctcc cctaccacac tctaactagc cgtatcgaa 120
 tgcagacccg gggttaagcc ccgggcttcc acatccgacg tgacaagccg cctacgagct 180
 cttnacgcc aataattccg gacaacgctt gcgccttacg tattaccgcg gctgctggca 240
 cgtagttagc cggcgcttct tctgcaggta ccgtnacttt cgcttcttcc ctgctgaaag 300
 aggtttacaa cccgaaggcc gtctccctc acgcggcgct gctgcacag gctttcgccc 360
 atngtgcant attcccact gntgntccc gtangagtct gggccgtgtc tcagtcccag 420
 tgtggccggg cgnctctca ggccggctac cgtcgtcgcc ttggtaggnc attaccaccc 480
 aacaagctga tangtcgngg gctcatcctt caccgncgga gntttaaccc cgtncatgcg 540
 ggacagagtg ttatccggtt ttanaccggt atncagggtt tgtcccatag tgaagggnag 600

- 21 -

atngccacgt gttatcaacg ttcgncacta atnatcaneg aancggcttc atcgttcgac 660
 ttgcatgtgt ta 672

<210> 23

<211> 678

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(648).

<223> "n" is unknown nucleotide

<400> 23

ctcagcgta gtcattggcca agagatccgc ctccgccacc ggtgttcctc ctgtatatct 60

gcgcatattca ccgctacacc aggaattccg atctccccta ccacactcta gctagcccgt 120

~~atcgaatgca gaccgggggt taagccccgg gctttcacat ccgacgtgac aagccgccta~~ 180

cgagctcttt acgccaata attccggaca acgcttgcc cctacgtatt accgcggtg 240

ctggcacgta gtttagccggc gcttcttctg caggtaccgt cactttcgct tcttccctgc 300

tgaaagaggt ttacaacccg aaggccgtca tccctcacgc ggcgtcgctg catcaggctt 360

tcgcccattg tgcaatattc cccactgctg cctcccgtag gagtctgggc cgtgtctcag 420

tcccagtgtg gccggctgcc ctctcaggcc ggctaccggt cgtcgccctg gtaggccatt 480

accaccaaac aagctgatag gccgcgggct catccttcan cgnccgagct ttaaccgctc 540

catgcgggac agagtgttat ccggtattaa acccgtttca gggcttgtcc canagtgaag 600

ggcagattgc cacgtgttat canccgttcg ncactaatca cancgaaneg ggttcacgt 660

tcgacttgca tgtgttaa 678

<210> 24

<211> 688

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(666)

<223> "n" is unknown nucleotide

<400> 24

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ggcccagana tccgncttcg ccaccggtgt tcttcctgaa tatctgcgca tttcaccgct      60
acaccaggaa ttccgatctc ccttaccaca ctctaactag cccgtatcga atgcagaccc      120
ggggttaagc cccgggcttt cacatccgac gtgacaagcg gcctacgagc tctttacgcc      180
caataattcc ggacaacgct tgcgccctac gtattaccgc ggctgctggc acgtaattag      240
ccggcgcttc ttctgcaggt accgtcactt tcgcttcttc cctgctgaaa gaggtttaca      300
accogaaggg cgtcatccct cagcgggcgt cgctgcatca ggctttcgcc cattgtgcaa      360
tattccccac tgctgntccc cgtangagtc tgggcccgtgt ctcagtccca gtgtggccgg      420
tcgncccttc aggcgggcta ccgtcgtcgc cttggtaggc cattaccca ccaacaagct      480
gatangccgn gggctcatcc ttcanctcgc gagctttcaa nccgtccat gcgggacaga      540
gtgttatccg gtattanacc ccgtntcagg gcttgtccan agtgaagggc agatngccac      600
gtgttatcac cgttcgccac taatnacanc gaaacggctt atcgtncgac tgcattgtgt      660
aacacncgca gcgttcgtcc tgagccag                                         688

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<210> 25

<211> 702

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(658)

<223> "n" is unknown nucleotide

<400> 25

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ccctcagggc cagtaatggg cccagagatc cgccttcgcc accggtgttc ctctgaata      60
tctgcgcatt tcaccgctac accaggaatt ccgatctccc ctaccacact ctagctagcc      120
cgtatcgaat gcagaccogg ggtaagccc cgggctttca catccgacgt gacaagccgc      180
ctacgagctc tttacgccc ataattccgg acaacgcttg cgcctacgt attaccggg      240
ctgctggcac gtagttagcc ggcgttctt ctgcaggtag cgtcactttc gcttcttccc      300
tgctgaaaga ggtttacaac ccgaaggccg tcatccctca cgcggcgctg ctgcatcagg      360

```

```

cittcgccca ttgtgcaata ttccccactg ctgcctcccg taggagtctg ggccgtgtct 420
cagtcaccagt gtggccgggtc gccctctcag gccggctacc cgtcgtcgcc ttgggtaggc 480
attancccan caacaagctg ataggncgcg ggctcatnct tcaacgccgg agctttcaan 540
cccgtccatg cgggacagag tgttatnccg tattaaacct gtttcagggc ttgttccaga 600
gtgaagggca gattgccacg tgttatcaac cgttcggcac taatcacaac gaagcggntt 660
atcgttcgac ttgcatgtgt taacaagccg ccagcgttcg tc 702

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<210> 26

<211> 711

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(687)

<223> "n" is unknown nucleotide

<400> 26

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tcagtaatgg cccagagatc cgccttcgcc accggtgttc ctctggata tctgcgcatt 60
tcaccgctac accaggaatt ccgatctccc ctaccacact ctagctagcc cgtatcgaat 120
gcagaccggt ggtaagccc cgggctttca catccgacgt gacaagccgc ctaccagctc 180
tttacgcca ataattccgg acaacgcttg cgcctacgt attaccgagg ctgctggcac 240
gtagttagcc ggcgtttctt ctgcaggta cgtcactttc gcttcttccc tgctgaaaga 300
ggtttacaac ccgaaggccg tcatccctca cgcggcgtcg ctgcatcagg ctttcgcccc 360
ttgtgcaata ttccccactg ctgcctcccg taggagtctg ggccgtgtct cagtcaccagt 420
gtggccgggtc gccctctcag gccggctacc cgtcgtcgcc ttggtaggcc attaccccac 480
caacaagctg ataggccgcg ggctcatcct tcaccgncgg agctttaacc ccgtcccatg 540
cgggacagag tgttatccgg tattagaacc cgtttccagg gcttgtccca gagtgaaggg 600
cagattgcca cgtgttactc anccgttcgn cactaatcan caacgaagcg gcttcatcgt 660
tcgacttgca tgtgttaagc acgccgncag cgttcgtcct gagccaggat c 711

```

- 24 -

<210> 27
<211> 522
<212> DNA
<213> actinomycete

<220>
<221> misc_feature
<222> (1)..(465)
<223> "n" is unknown nucleotide

<400> 27
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tcaccgctac accaggaatt ccatctctcc ctaccgaact ctagcctgcc cgtatcgact 120
gcagaccggy ggtaagccc cgggctttca caaccgacgt gacaagccgc ctacgagctc 180
tttacgcccataaattccgg acaacgcttg cgcctacgt attaccgcyg ctgctggcac 240
gtagttagcc ggcgcttctt ctgcaggtac cgtcactttc gcttcttccc tgctgaaaga 300
ggtttacaaa ccgaaggccg tcatccctca cgcggcgtcg ctgcatcagg ctttcgccc 360
ttgtgcaata tccccactg gtgntcccg tangagtctg gggcgtgtct cantccagt 420
tgggcggtcg cctctcaggg cggctaccgt cgtcgcttgg tgagnacta ctcacaacaa 480
gctgataggc gcgggctcat ctgcaacggc ggagctttac ac 522

<210> 28
<211> 670
<212> DNA
<213> actinomycete

<220>
<221> misc_feature
<222> (1)..(638)
<223> "n" is unknown nucleotide

<400> 28
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caccgctaca ccaggaattc ccatctctccc taccacactc taactagccc gtatcgaatg 120
cagaccgggg gttaagcccc gggctttcac atccgacgtg acaagccgcc tacgagctct 180
ttacgcccataaattccgga caacgcttgc gccctacgta ttaccgcygc tgctggcacg 240


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tagttagccg gcgcttcttc tgcaggtacc gtcactttcg cttcttccct gctgaaagag   300
gtttacaacc cgaaggccgt catccctcac gcggcgtcgc tgcatacaggc ttctgccccat   360
tgtgcaatat tccccactgc tgccctcccg angagtctgg gccgtgtctc agtcccagtg   420
tggccgggtcg cccctctcagg ccggctaccg tcgtcgccctt ggtaggccat taccacacaa   480
caagctgata ngncgngggc tcatacttca ccgncggagc tttcaanccc gtcccatgcg   540
ggacagagtg ttatccggta ttaaaccctg ntccagggtc tgtccatagt gaagggcaga   600
ttgccaagtg ttatcancg ttcgncacta atcatcancg aagcggcttc atcgttcgac   660
tgcattgtgtt                                     670

```

<210> 29

<211> 676

<212> DNA

<213> actinomycete

<220>

<221> misc_feature

<222> (1)..(666)

<223> "n" is unknown nucleotide

<400> 29

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tgcgcatcttc accgctaacc caggaattcc gatctcccct accacactct anctagcccc   120
tategaatgc agaccggggg ttaagccccg ggctttcaca tccgangtga caagccgcct   180
acgagctctt tacgcccatt aattccggac aangcttgcg ccctacgtat taccggcgnt   240
gctggcacgt agttagccgg cgcttcttct gcaggtaccg tcactttcgc ttcttccctg   300
ctgaaagagg ttacaaccc gaaggccgtc atccctcaen cggcgtcgct gcatcaggct   360
ttcgcccatt gtgcaatatt cccactgct gcctcccgta ggagtctggg ccgtgtctca   420
atcccantgt ggccggtcgc cctctcangc cggtaccgt cgtcgcttgg taggccatta   480
ccccaccaac aagctggata ggncgggggc tcattcttca ccgcccgaag ctttaanccc   540
gtccatgcgg gananagtgn atccngtat taaaccngt ttcagggtt gtccanagt   600
aaggnggatt gcccnagtgt ttatncccg ttgcccanta atcnacaacg aaagcggntt   660
cntcgnttcg acttgc                                     676

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